

### Abstract

A system for microbially deactivating items. The system includes a circulation system for circulating a microbial decontamination fluid through a deactivation chamber that forms a part of the circulation system. A container for holding items to be deactivated is provided. The container has a sealable cavity in which the items to be deactivated may be placed, and at least one valve element that is movable between an open and a closed position to regulate fluid flow into the cavity. An actuator in the deactivation chamber is operable to move the valve element to an open position when the container is disposed within the deactivation chamber, wherein the cavity within the container is in fluid communication with the circulation system when the valve element is in the open position.